



**STATE OF ARIZONA**  
**DEPARTMENT OF EMERGENCY AND MILITARY AFFAIRS**  
DEMA Procurement Office, Building #M5330  
5636 East McDowell Road  
Phoenix, Arizona 85008-3495.

**SOLICITATION NUMBER: M8-0040**

**Provide an Install HVAC Equipment @ Papago Park Military Reservation, Emergency Operations Center, 5636 E. McDowell Road #5103, Phoenix, AZ. 85008**

**SOLICITATION AMENDMENT # 1**

**ISSUE DATE: April 11, 2008**

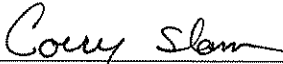
**AMENDMENT**

The following changes, additions, and/or deletions are for the above noted Invitation for Bid, and all other terms and conditions shall remain the same.

**This amendment must be signed and returned with the offer.**

This amendment forms a part of the contractual documents/solicitation and modifies them as follows:

1. To obtain copy of drawing of existing duct work and unit locations please call (602)267-2699 or pickup @ 5636 E. McDowell, #5330, Phoenix, AZ. 85008
2. Addressing the question on the diversity factor is the following: During testing of VRV systems (variable refrigerant volume) it was determined that properly sized systems rarely use the total capacity of the outdoor unit, averaging 4% of less during its life.  
One of the reasons for this is that these indoor systems start their cycling at their given set point, as the temperature increases the system adjusts incrementally to meet the load. In this way the total capacity and demand for the indoor units is not initially needed. Since there are multiple zones for the system, each zone is unique in their needs, use and demand.  
The diversity factor can range up to 130% of the outdoor unit's full capacity. The determination of what that range is, is predicated on several external factors including number of rooms, the physical location, room use and heat loads. Typically when the system is designed for long piping runs the amount of diversity is also lessened.  
Many applications take advantage of this benefit. Most engineers size the system to stay within the individual room loads and the "block" load of the building.  
Another aspect discovered is that since the indoor units usually operate in the 40 to 70 percentile, the indoor heat exchangers actually increase the COP making them more efficient. Also because the outdoor unit isn't always running at 100% the condensing coil operates as if it's larger and more efficient most of the time.
3. On page 1 Contract Term is deleted. Contract type remains unchanged. The Bid due date and time for receipt of bids shall remain unchanged

Name and Title of Procurement Officer  Corry Slama, C.P.M., CPPB Procurement Manager	Offeror hereby acknowledges receipt and understanding of this amendment.
<div style="text-align: center;">   As Procurement Officer and not personally </div> <div style="text-align: right; margin-top: 20px;"> 4/14/08  Date </div>	Signature _____ Date _____
	Type/Printed Name _____
	Title _____
	Company Name _____
	Address _____
	City _____ State _____ Zip Code _____

**END OF AMENDMENT**